

REMARKS

Claims 38-42, 47, 50-57, 131-133, 144-147, and 149-151 are pending with this amendment. Claims 38, 39, 42 and 131-133 are amended herein. Support for the amendments to the claims is replete throughout the application as filed.

The claims were originally rejected in the Action of March 19, 2008; however, the Amendment filed May 19, 2008 (and received by the USPTO on May 21, 2008) was not entered because the claim amendments allegedly raised new issues that would require further consideration and/or search. Applicants herein resubmit the claim amendments and remarks as provided on May 19, 2008, along with a Request for Formal Examination. Applicants traverse all rejections to the extent that they are applied to the amended claims, for the reasons of record and those noted herein. For convenience of the Examiner, Applicants' response addresses each rejection in the order presented in the final Action dated March 19, 2008. Because the amendments put the claims in condition for allowance, or substantially reduce issues on appeal, entry is respectfully requested.

REJECTION OF CLAIMS UNDER 35 USC § 112, FIRST PARAGRAPH

Claims 38, 39, 41, 42, 47, 50-57, 131-133 and 139-143 were rejected for alleged lack of enablement. To expedite prosecution, and without acquiescing to any rejection of record, Applicants have amended the claims to address the issues raised in the rejection.

Claim 38

The rejection acknowledges that claim 38 is enabled for adding or substituting unnatural amino acids, but alleges that the claims were overbroad for including too many possible variants. In a sincere effort at advancing prosecution, Applicants have amended claim 38 to recite that the protein is at least 90% identical to the wild-type GAL 4. The claim also includes the limitations that the protein include a full-length wild-type N-terminal DNA binding domain and a full-length wild-type C-terminal activation domain. The claim further includes the limitation that the recombinant mutant GAL4 protein is capable of activating a GAL4 responsive gene.

Claims 139-143

Rejection of Claims 139-143 for alleged lack of enablement is moot in light of Applicants' amendment canceling these claims. Claim cancellation is made without prejudice to subsequent renewal or public dedication.

Claims 146 and 147

Claims 146 and 147 were rejected because they allegedly were drawn to a GAL4 protein with any number of mutations in the DNA activation or binding domains. Applicants feel that the claims may have been mis-read, as they are expressly drawn to (146) an all wild-type DNA binding domain (i.e., the domain comprising no unnatural amino acids) and (147) an all wild-type DNA activation domain (again, the domain comprising no unnatural amino acids). Accordingly, the point of the claims is essentially the opposite of the reasoning presented in the rejection. The rejection should be withdrawn.

Claims 42, 47, 50-57, 131-133

The rejection argues that these claims encompass any protein comprising any type of unnatural amino acids that are further modified post-translationally. Solely to advance prosecution, and without acquiescing to any rejection of record, the claims have been amended to recite three specific (and specifically exemplified) unnatural amino acids and analogues thereof, rather than any possible unnatural amino acid. Here again, claim scope is very modest in view of Applicants' disclosure.

As the Examiner will appreciate, the orthogonal translation systems of the invention are *generally* useful for the specific incorporation of these unnatural amino acids. Accordingly, the fact that they can be used to produce essentially any protein of interest *corresponds* to the scope of the invention provided by the inventors. Furthermore, post translational modifications can be carried out by any well-characterized system for performing them, which the rejection appears to acknowledge.

REJECTION PURSUANT TO 35 USC 112, PARAGRAPH 2

Claim 148 was rejected for improper antecedence. The claim has been cancelled, rendering the rejection moot. This cancellation is made without prejudice to subsequent renewal.

REJECTIONS PURSUANT TO 35 USC 103(a)

Claims 39, 41-42, 47, and 131-133 were rejected for alleged obviousness over Schultz USPN 7,129,333. To the extent that the rejection is applied to the amended claims, Applicants respectfully traverse.

The rejection argues that claim 39 is obvious, because Schultz teaches glycoprotein mimetics produced by incorporating p-acetyl-L-phenylalanine into proteins. Applicants respectfully submit that this rejection simply fails to state a *prima facie* case of obviousness. *All* of the limitations of the rejected claim must come out of the prior art before a *prima facie* case can be made. MPEP 2143.03. In this case, a *particular* configuration of recombinant protein is being claimed, in which a p-acetyl-L-phenylalanine, p-amino-L-phenylalanine, p-azido-L-phenylalanine, or analogue thereof must be present, and must include a post-translational modification comprising a saccharide; and the protein must further include an oligosaccharide covalently coupled to asparagine, threonine or serine. The rejection fails to state where the prior art teaches this *particular* combination of elements. *General* arguments regarding selection markers and glycoprotein mimetics have no clear relationship to the *claimed* invention at issue. As the recent Examiner guidelines for assessing obviousness under KSR make express, the Office *must* provide a *specific* recitation of where the prior art provides each claim element, and how the combination of elements is to be obtained from the prior art. This rejection should be withdrawn.

Claims 41-42, and 131-133 are further rejected for alleged obviousness for essentially similar reasons. Here again, the statement that the cited art includes glycoprotein mimetics, and that eukaryotic expression can be performed, simply fails to state a case for obviousness. The location of each claim element in the prior art needs to be identified and the *specific* combination being asserted must be clearly indicated in the rejection. Absent *specificity*, the rejection fails to state a case. The rejection must be withdrawn.

USSN 10/825,867 Chin et al.
Amendment and Response dated May 19, 2008
Reply to Office Action of March 19, 2008

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the claims are deemed not to be in condition for allowance after consideration of this Response, a telephone interview with the Examiner is hereby requested. Please telephone Jonathan Alan Quine at (510) 337-7871 to schedule an interview.

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Respectfully submitted,



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Attachments:

- 1) A transmittal sheet;
- 2) A fee transmittal sheet;
- 3) Request for Continued Examination Transmittal; and
- 4) Receipt Acknowledgement Postcard